



## NCDOT Prioritization 3.0 Project Summary

**SPOT ID:** H141779

**Mode:** Highway

**Status:** Submitted

### (Durham Citywide Signal System)

**From/Cross Street:**

**Specific Improvement Type:** 13 - Citywide Signal System

**To:**

**Project Category:** Regional Impact

**Length:** 63.09

**TIP#:**

**Fully Funded in Draft STIP?** No

**Cost to NCDOT:** \$12,824,000

#### Description:

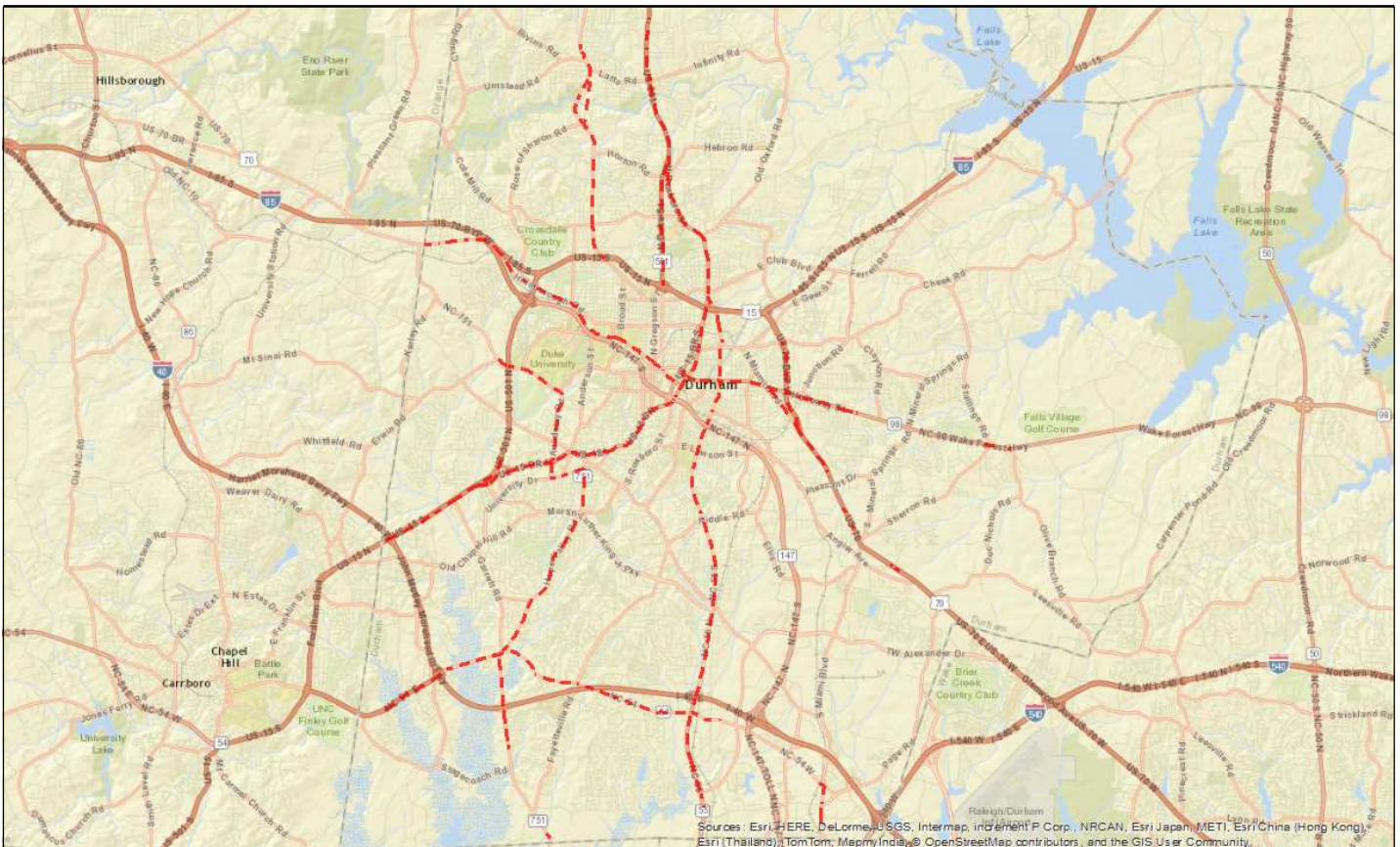
Upgrade the City of Durham Signal System (inc. central servers, signal controller upgrades for FYA and transit priority, CCTV network, fiber optic communications network, etc.).

**Division(s):** Division 5, Division 7

**County(s):** DURHAM, ORANGE

**MPOS(s)/RPO(s):** Durham Chapel Hill Carrboro MPO

#### Project Location



**Statewide Mobility Total Score: 0**

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
<b>Totals: Weight: 0% Weighted Score: 0</b>	N/A	N/A

**Regional Impact Total Score: 42.51**

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (25%) 52.52	Percent: 15% Points: 0	Percent: 15% Points: 100
Safety (10%) 65.49		
[Travel Time] Benefit/Cost (25%) 27.87		
Accessibility / Connectivity (10%) 8.62		
<b>Totals: Weight: 70% Weighted Score: 27.51</b>		

**Division Needs Total Score: 22.63**

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (20%) 52.52	Percent: 25% Points: 0	Percent: 25% Points: 0
Safety (10%) 65.49		
[Travel Time] Benefit/Cost (20%) 27.87		
<b>Totals: Weight: 50% Weighted Score: 22.63</b>		

**Project Data \*****Existing Conditions**

Existing Cross-Section:	
Speed Limit:	41
Length (miles):	63.09
Facility Type:	Arterial
Access Control:	None
Functional Classification:	Minor Arterial
Terrain Type:	Rolling
Lane Width:	12
Paved Shoulder Width:	1
Roadway has Curb & Gutter?	Yes
Volume (AADT):	19861.21
Capacity:	26733.75
Volume/Capacity Ratio:	0.74
% Autos:	97%
% Trucks:	3%
Truck Volume:	694.41
Crash Density:	74.63
Crash Severity:	48.73
Critical Crash Rate:	73.12
Crash Frequency:	0
Severity Index:	0
County Tier Designation:	3
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	21
Existing Median Type (for Cost Estimation):	Undivided
Pavement Condition Rating:	80
Actual Congested Speed:	32.12
Travel Time Index:	1.09

**Project Benefits**

Project Cross-Section:	
Speed Limit:	41
Length (miles):	63.09
Facility Type:	Arterial
Access Control:	None
Functional Classification:	Minor Arterial
Terrain Type:	Rolling
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	4
Travel Time Savings for 30 Years (Total):	15892691.18
Travel Time Savings for 30 Years (Autos):	15337032.36
Travel Time Savings for 30 Years (Trucks):	555658.82
Long-Term Employment:	
% Change in Economy:	
Provides Direct Connection to Transportation Terminal?	Yes
Does project upgrade how the roadway functions?	No
In CTP or LRTP?	
CTP/LRTP Name:	
CTP/LRTP Completion Year:	
Submitted by:	Durham Chapel Hill Carrboro MPO

\* Data reflects calculations which include weighted averages (where applicable) and represent raw output from the Department's SPOT On!line tool and associated databases.

**Project Ownership****Division**

<b>Division</b>	<b>Percent</b>	<b>Regional Impact</b>	<b>Division Needs</b>
Division 5	100%	0	0
Division 7	0%	0	0
	0%	0	0
<b>TOTAL Division Points</b>		<b>0</b>	<b>0</b>

**MPO/RPO**

<b>MPO/RPO</b>	<b>Percent</b>	<b>Regional Impact</b>	<b>Division Needs</b>
Durham Chapel Hill Carrboro MPO	100%	100	0
	0%	0	0
	0%	0	0
<b>TOTAL MPO/RPO Points</b>		<b>100</b>	<b>0</b>

**Project Cost and Source**

Construction Cost:	\$12,824,000	Cost Estimation Tool
Right-of-Way Cost:	\$0	Cost Estimation Tool
Utilities Cost:	\$0	Cost Estimation Tool
Total Project Cost:	\$12,824,000	
Other Funding:	\$0	None
<b>Cost to NCDOT :</b>	<b>\$12,824,000</b>	